Wark Order August-28-13 12:		04	3.3 9 11	*106	3223*						Page 1
Revision ID:	46.3911 HIM	B_1-(06223	Accept	*N900	0401	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Setup	Start Stop	171.	S1* S2*
Start Date: 8/Required Date: 8/Reference:		Start Qty: 20.00 Req'd Qty: 20.00	*21 *21	9* 7* *2 (*	Cust Item I Customer:	ID:					
Approvals:	Process Plan:	MLS		SPC (Y/N):		ate:		Run	Start Stop		R1* R2*
Sequence ID/ Work Center ID		peration escription		Set Up/ Run Hours	Tool ID	Tool # I	Plan Ac		•	Reject Number	Insp. Stamp
Draw Nbr	Revisi	on Nbr									
646.3900	N/C				,						
110		- Lau		0.00							
110 Waterjet		Memo		0.00			0	21	_0_		Au 13.16.0
FLOW CNC Waterjet	V	1-Cut as p Dwg Rev: Prog Rev:	er Dwg N/C N/C	t e							(3:(#/6
		2-Deburr i	f necessary								
120	Ç	C2- Inspect parts off	machine FAI/FAIB	0.00							
120 QC Quality Control		Memo		0.00			· &	2/	0		Au 13.11.

NCR:	⁄es	/ No				WORK ORDER NON-O	100	NFORM	MANCE / UPDATE					A
											QA Closed:	Da	ate:	
Work Orde	er: _		. —			DISPOSITION	,		-		PARTMENT,			
Part I	No.					Rework Scrap Use-as-is		ľ	Skid-tube Crosstub Machining Small Fa noforming Finishin	b	4	Water Jet d. Eng. Coor. re/Packaging		Engineering Quality Other
NCR I	۷o.					Work Order Update]	i .	Large Fab Composit	_		Supplier	_	
Root					Descri	ption of work order update		nitial	Action		Sign &			
Cause		Date	Step	Qty		or Non-conformance	Ch	ief Eng	Description		Date	Verification	on	QC Inspector
Doc/Data														
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							AUL	T CATE	GORY					
Landi	ing (1			_	General		7		_	7			
	<u> </u>	Bending			<u> </u>	Bend		Grain		ļ	Ovalized			Pressure/Forced
	L	Centre N	ot Conce	ntric to	O/S	BOM/Route	<u> </u>	Hardwa			Over/Under		-	Temperature/Cure
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	L	Cuffs				Contamination	_	Mainte	enance		Part Moved			
	\vdash	Heat Trea			L	Countersink	\perp	Mislabe		\perp	Positioned V	•		
	\vdash	Inspectio	-	Tube	L	Cut Too Short		Misread	d		Power Loss/	Surge	Ш	Other
		Ripples in	n Bend			Drill Holes		Offset						
1		Torque V	Vaves in I	Extrusio	n [Drawing		Out of 0	Calibration					

Out of Sequence

Outside Dimensions

DQA:

Date:

Turning Sequence

Wave/Twist in Tube

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Werk Or	der ID	10622
August-28-13	12:54:12	PM

Work Order ID		*106		Page 2	
tem ID: 646.3911 Revision ID: tem Name: SHIM		Accept	*N90004010	Q.	NS1* NS2*
Start Date: 8/28/13 Required Date: 8/28/13 Reference:	Start Qty: 20.00 *20 Req'd Qty: 20.00 *20		Cust Item ID: Customer:		
~ -	Plan: Date: Date:	-	Date:	Stop	NR1* NR <i>2</i> *
Sequence ID/ Work Center ID 130 *130* QC Quality Control	Operation Description QC8- Inspect parts - second check Memo	Set Up/ Run Hours 0.00 DAS 27 0.00 2989	Tool ID Tool # Plan Code		
*140 *140 *Outsource3 Outsource process - Cad plate	Outsource process-Cadplate per QSI017 4.1.9 Memo Issue P/O: 2 1961	9.1 0.00 0.00		CL_13/1/0	6 D
150 *150* Packaging Packaging	Receive & Inspect for Damage & Mat'l Certs Memo	0.00		- [13/14]	p bo

										DQA:	Date:	
NCR: Y	es / No)			WORK ORDER NON-C	CON	FORM	MANCE / UP	DATE			A
										QA Closed:	Date:	
Work Orde	r.				DISPOSITION				AGAINST DE	PARTMENT	PROCESS	
WOIK OIGE	·· ——			· · · · · · · · · · · · · · · · · · ·	Rework	1		Skid-tube	Crosstube	1	Water Jet	Engineering
Part N	lo.				Scrap	1 1		Machining	Small Fab	Pro	d. Eng. Coor.	Quality
		:			Use-as-is	1		noforming	Finishing	ł	e/Packaging	Other
NCR N	lo				Work Order Update			Large Fab	Composite	·	Supplier	
Root			1	Descri	ption of work order update	In	nitial	Act	tion	Sign &		
Cause	Date	Step	Qty	,	or Non-conformance	Chi	ef Eng	Desc	ription	Date	Verification	QC Inspector
Doc/Data												
Equip/Tooling												
Operator												
Material			1			Ì						
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					F	AULT	CATE	GORY				
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	Bendin	g			Bend		Grain			Ovalized		Pressure/Forced
	Centre	Not Conce	entric to	o/s	BOM/Route		Hardwa	re		Over/Under	tolerance	Temperature/Cure
	Cracks				Broken/Damaged		Inspecti	on Incomplete		Part Incorre	ct	Weld
	Crushe	d/Crimped	l		Burrs		Instruct	ions Incomplete/	Unclear	Part Lost/Mi	ssing	Wrong Stock Pulled
	Cuffs				Contamination		Mainte	nance		Part Moved	-	_
	Heat T	reat			Countersink		Mislabe	led		Positioned V	Vrong	_
	inspec	tion Strip is	n Tube		Cut Too Short		Misread	i		Power Loss/	Surge	Other
	Ripple	in Bend			Drill Holes		Offset			-		

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

106223

Page 3

August-28-13 12:54:12 PM

Item ID:

646.3911

8/28/13

Accept

N900040100

Setup Start

Revision ID:

Start Date:

SHIM Item Name:

Required Date: 8/28/13

Start Qty: 20.00

Req'd Qty: 20.00

Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan:

Date:

Date:

Tooling:

Date:

Identify as per dwg & Stock Location: 5+5-36 0.00

SPC (Y/N):

Date:

Run

Stop

Sequence ID/ Work Center ID

Operation Description Set Up/ **Run Hours** Tool ID

Tool # Plan Code

Accept Qty

Reject Qty

Reject Insp. Number Stamp

160

OC5- Inspect part completeness to step on W/O

0.00

160 OC

Quality Control

Memo

0.00

170

Packaging

170

Memo

0.00

Packaging

***IDENTIFY AS PER APICAL MPP-120 BY STAMPING THE P# AND

REV***

180

QC21- Final Inspection - Work Order Release

0.00

120

Memo

0.00

Quality Control

DAS

NCR: Y	es / No				WORK ORDER NON-C	ONFO	RN	MANCE / UPDATE					A :
										QA Closed:	Dat	:e:	·
Work Orde	eń:				DISPOSITION	,		·		PARTMENT,	_	_	
Part N					Rework Scrap Use-as-is Work Order Update	Th	N erm	Skid-tube Crosstube Machining Small Fab noforming Finishing Large Fab Composite		1	Water Jet d. Eng. Coor. e/Packaging Supplier		Engineering Quality Other
Root		1		Descri	ption of work order update	Initia	al	Action		Sign &		Т	
Cause	Date	Step	Qty		or Non-conformance	Chief E	ng	Description		Date	Verification	1	QC Inspector
Doc/Data													
Equip/Tooling													
Operator							İ					Ì	
Material													
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Other													
Process	_]					ļ						
Supplier						}		•					
Training		1										-	
Unapproved		<u> </u>	J			<u> </u>							
1 41	6				· · · · · · · · · · · · · · · · · · ·	AULT CA	AIEC	JURY					
Langii	ng Gear Bending				General Bend	Gra	in			Ovalized	Г	٦.	ressure/Forced
		ot Conce	ntric to	~/s	BOM/Route	$\boldsymbol{\vdash}$	dwar	ro	⊢	Over/Under	talaranca	_	emperature/Cure
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	Heat Tre	at		<u> </u> -	Countersink	-	label		_	Positioned V	/rong		
	—	on Strip in	ı Tube		Cut Too Short		read			Power Loss/	, , ,	\neg_{c}	Other
	Ripples i				Drill Holes	Offs				1 2000).			
	—	Naves in I	Extrusio	n	Drawing	\vdash		Calibration					
	⊢ ⊣ '	Sequence			Finish	\vdash		equence					

Outside Dimensions

DQA:

Date:

Wave/Twist in Tube

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Picklist Print

August-28-13 12:54:15 PM

Work Order ID: 106223

106223

Parent Item:

646.3911

646 3911

Parent Item Name:

SHIM

Start Date: 8/28/13

Required Date: 8/28/13

Page 1

Start Qty: 20.00

Required Qty: 20.00

Comments:

IPP REV:A 12.10.23 NEW ISSUE DD VERF:

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MC1095S.032		Purchased	No			110	sf	8.5000	0.03	-0.631578	_		
MC10959	S 032								**		A	13	111.05

C1095 Blue Tempered Spring Steel Sheet .032

Loc Code Location Loc Qty MAT022 8.5 8.5 123537

NCR:	Yes	1	No
IIVIII.	103	,	110

												DQA:	Date:	
NCR:	Yes	/ No					WORK ORDER NON-C	CON	VFORN	AANCE / UP	PDATE	•		L.
												QA Closed:	Date:	
Vork Ord	er:	۴					DISPOSITION				AGAINST D	EPARTMENT	/PROCESS	
	•	······································					Rework]		Skid-tube	Crosstube	_	Water Jet	Engineering
Part I	No.					ı	Scrap			Machining	Small Fab	_	d. Eng. Coor.	Quality
NCR	No.	****					Use-as-is Work Order Update			oforming Large Fab	Finishing Composite	Rec/Stor	re/Packaging Supplier	Other
Root					Des	crir	tion of work order update		nitial	Ac	ction	Sign &		
Cause		Date	Step	Qty			r Non-conformance	Ch	ief Eng	Desc	cription	Date	Verification	QC Inspector
oc/Data														
quip/Tooling												1		
perator														
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etup											,			
ther														
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upplier														
raining	L													
napproved	<u> </u>		<u> </u>					上						
								AUL	T CATE	GORY				
Land	ng (7			ī		General	_	1		r-	_	_	1
	<u> </u>	Bending					Bend	\vdash	Grain		<u> </u>	Ovalized		Pressure/Forced
	\vdash	Centre No	ot Concer	ntric to	o/s	-	BOM/Route	\vdash	Hardwa		_	Over/Under		Temperature/Cure
	<u>_</u>	Cracks					Broken/Damaged	<u> </u>	1	on Incomplete		Part Incorred	<u> </u>	Weld
	\vdash	Crushed/	Crimped				Burrs	<u> </u>	4	ions incomplete	/Unclear	Part Lost/Mi	ssing	Wrong Stock Pulled
		Cuffs			:		Contamination		Mainte			Part Moved		
	_	Heat Trea					Countersink	<u>_</u>	Mislabe			Positioned V	_	1
	_	Inspection		Tube			Cut Too Short	<u> </u>	Misread	i	L	Power Loss/	Surge	Other
	_	Ripples in					Drill Holes	_	Offset					
		Torque W	laves in E	Extrusio	n		Drawing			Calibration				
	1	Turning S	ennence				Finish	1	Out of 9	Seguence				

Outside Dimensions

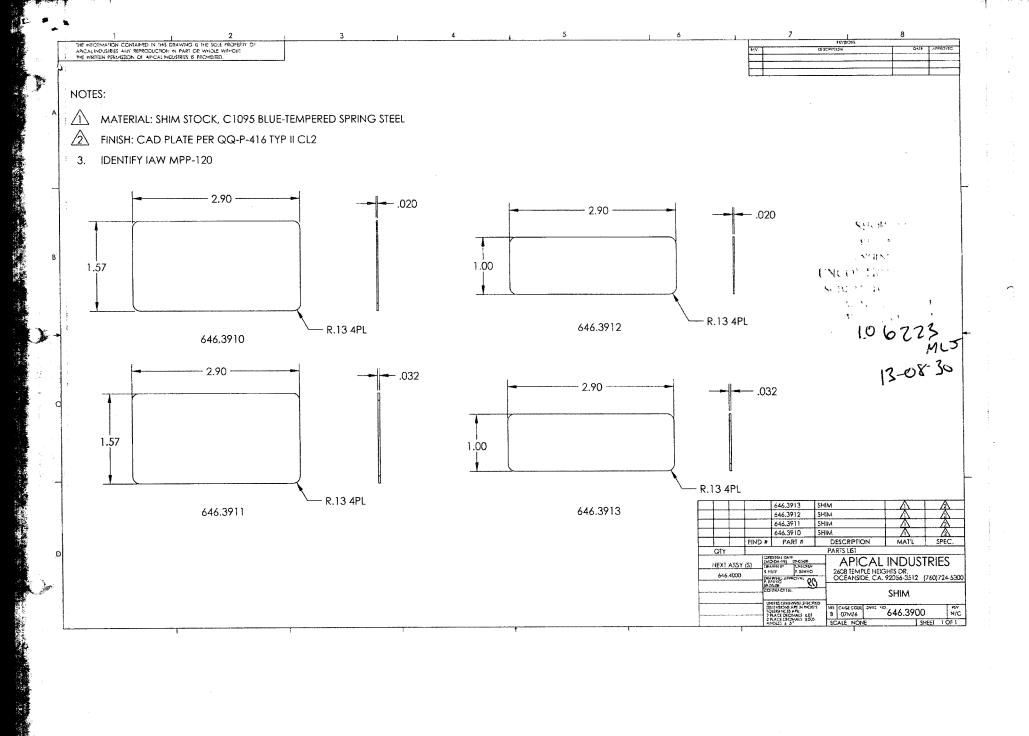
Wave/Twist in Tube

DART AEROSPACE LTD	Work Order:	106223
Description: Shim	Part Number:	646.3911
Inspection Dwg: 646.3900 Rev: N/C		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
1.57	+/-0.005	1,57"			V	UKm - 01
2.90	+/-0.005	2 90"			V	
0.032	+/-0.005	032"	-		V	
	ļ			<u> </u>		
<u> : </u>						
		.				
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asured by:	Le .	Audited by:	DAS 27		Preliminary	Approval:
	2011.00	Date:	R 11	24		Date:
	hange		- / · · ·	7	Pavid	sed by Approv

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CERTIFICATE OF CONFORMANCE

CADORATH PLATING CO. LTD. **2150 LOGAN AVENUE** WINNIPEG, MANITOBA R2J-0J1

DATE:

Dec-02-2013

CONSIGNED TO: Dart Aerospace Ltd.

1270 Aberdeen St.

Hawksbury, ON K6A 1K7

W/O #:

130251

INVOICE #:

68742

CONTRACT OR

PURCHASE ORDER #

PO21961

DESCRIPTION:

SHIM

QTY

21

P/N# 646.3911

S/N # 106223

CADMIUM PLATING IAW AMS-QQ-P-416C TYPE 2 YELLOW CLASS 2. BAKE HEAT CHART # 13-1051.

CERTIFICATE: I certify that the items indicated here on have been inspected and tested and conform to all specifications and requirements detailed on the contract or purchase order.

Approved Inspector: